

IN THE SPECIFICATION:

Please replace paragraph 2 with the following amended paragraph:

[002] The present invention relates to a reinforcing support structure for a three-wheeled motor vehicle, and to a three-wheeled vehicle incorporating the described reinforcing support structure. More particularly, the present invention relates to a reinforcing support structure, and to a three-wheeled motor vehicle in which a main frame cage is pivotally rockable about a rocking axis, with respect to a rear wheel support structure.

Please replace paragraph 7 with the following amended paragraph:

[007] The drive shaft can transmit the driving forces to the rear wheels 307 and 307 even if the rear wheels 307 and 307 move in the vertical direction. For such transmission, however, the bending pivot angle of the constant velocity joint being a part of the drive shaft has to be a predetermined angle or smaller. Accordingly, if the total length of the drive shaft is short, it will cause difficulty in reducing such a bending pivot angle.

Please replace paragraph 8 with the following amended paragraph:

[008] In order to make the bending pivot angle of relative to the drive shaft equal to or smaller than the predetermined angle, there is a need to increase the total length of the drive shaft. As a result, the distance between the centers of the right and left rear wheels, i.e., the tread (or wheel base), which denotes a horizontal distance between the centers of right and left tire tracks contacting the road surface) is increased, thereby rendering the vehicle wider. Thus, it is hardly applicable to small-sized vehicles, resultantly impairing the vehicle mobility.

Please replace paragraph 10 with the following amended paragraph:

[010] Figure 26 is a cross-sectional view of a transmission of a conventional three-wheeled motor vehicle. Shown therein is a portion of a vehicle powertrain, in which an engine 311 is coupled with an automatic belt-driven transmission 312, and a differential gear 314 accommodated in a ~~rear axle~~ gear box 313 is coupled with the belt-driven automatic transmission 312 via gears and chains, and rear wheel axles 316 and 316 are attached, respectively, to the right and left sides of the differential gear 314. Rear wheels 317 and 317 are attached, respectively, to these rear wheel axles 316 and 316.

Please replace paragraph 12 with the following amended paragraph:

[012] Therefore, an object of the present invention is, through improvement of a three-wheeled motor vehicle, to reduce the tread of rear wheels while suppressing the bending pivot angle of a drive shaft structuring a power transmission mechanism to be a predetermined angle or smaller.

Please replace paragraph 14 with the following amended paragraph:

[014] A rear drive wheel is attached to each of the suspension arms, and the main frame cage is made rockable by a rocking arm with respect to the suspension arms. Engine output is transferred to the right and left rear drive wheels via a transmission, a reduction gear, and right and left output axes provided to the reduction gear, wherein the right and left output axes both intersect with the rocking axis, and the points of intersections intersection of the left and right output axis with the rocking axis are placed in each different position not coincident.

Please replace paragraph 16 with the following amended paragraph:

[016] Further, intersection points of the right and left output axes ~~and with~~ the rocking axis are each placed in a different position along the rocking axis. Accordingly, if the right and left output axes are so provided as to be ~~away spaced apart~~ from each other in the front and rear direction of the vehicle body, for example, the drive shaft can be placed extensively in the diagonal direction from the right and left output axes to the rear drive wheel side.

Please replace paragraph 17 with the following amended paragraph:

[017] As such, compared with a case where the right and left output axes are provided on the side part of the transmission or the reduction gear, the total length of the drive shaft can be increased in the present invention. In consideration thereof, the bending pivot angle of the drive shaft can be suppressed to a small value when the rear drive wheels move in the vertical direction, and what is better, the tread of the rear drive wheels can be reduced because the drive shaft is placed extensively in the diagonal direction even if it is long in total length.

Please replace paragraph 18 with the following amended paragraph:

[018] According to a second aspect of the present invention, the rear drive wheel is coupled to the output axes via a drive shaft including a pair of constant velocity joints, and a bending pivoting part of the constant velocity joint on the side of the output axis is placed on the rocking axis.

Please replace paragraph 19 with the following amended paragraph:

[019] By placing the bending pivoting part of the constant velocity joint on the side of the

output axis on the rocking axis, even if the output axes tilt responding to the vehicle body rocking in the lateral direction, the constant velocity joint remains still. Thus, even if the drive shaft swings together with the suspension arms, the bending pivot angle of the constant velocity joint can be reduced.

Please replace paragraph 20 with the following amended paragraph:

[020] According to a third aspect of the present invention, the reduction gear includes a differential mechanism, and the right and left output axes are placed in the front and rear, respectively, of the differential mechanism.

Please replace paragraph 69 with the following amended paragraph:

[069] The power transmission mechanism 35 of the powertrain unit 17 includes: a belt-driven continuously variable transmission 78 extending from the left rear part of the engine 34 toward the rear, a gearbox 81 as a reduction gear coupled to the rear part of the continuously variable transmission 78, and a drive shaft 74 connected to an output axis located in located at the front side of the gearbox 81 and a drive shaft 73 connected to an output axis located in located at the rear side of the gearbox 81.

Please replace paragraph 76 with the following amended paragraph:

[076] The arc-shaped reinforcing links 88 and 89 are each provided, at the center, with a side protruding section 95. The side protruding sections 95 are supportively attached, respectively, to brake calipers 96 and 96, and the arc-shaped reinforcing links 88 and 89 are supported so as to not to swing relative to the respective brake disks 97 98, 98. Herein, 97 and 97 each denote a

brake unit including the brake caliper 96 for sandwiching any corresponding brake disk 98 or 98 by the corresponding brake caliper 96 or 96, responding to hydraulic pressure. The brake disks 98 and 98 are respectively attached to the wishbone suspension arms 71 and 72. Numeral 100 denotes a bolt provided to serve as a respective swing axis of the respective arc-shaped reinforcing links 88 and 89.

Please replace paragraph 84 with the following amended paragraph:

[084] In Fig. 8(c), the main frame cage 16 rocks toward the left of the vehicle body (arrow left in the drawing denotes left side of the vehicle body) with respect to the connection bar 92 coupled to the side of the suspension arms. Responding to the L pipe 54 tilting by an angle θ , the case 111 of the rocking damper mechanism 93 rotates relative to the thrust member 113. The ~~dubber rubbers-~~ rubber dampers 112 accommodated in the case 111 are compressed by the case 111, and the thrust member 113 is sandwiched therebetween. Accordingly, the countervailing kickback reaction occurs to push the case 111, and by extension, the main frame cage 16, back toward the original position thereof.

Please replace paragraph 106 with the following amended paragraph:

[106] As such, in the present invention, the internal shafts 195 and 205 as the right and left output axes of the gearbox 81 are so provided as to be ~~away spaced apart~~ from each other in the fore and aft direction of the vehicle body.

Please replace paragraph 111 with the following amended paragraph:

[111] Figure 15 is a plan view mainly showing the axial placement in the power transmission mechanism according to the present invention. Illustrated therein are the internal shafts 195 and 205 as right and left output axes of the gearbox 81, and the bending pivoting parts of the drive shafts 73 and 74, and the swing axes of the wishbone suspension arms 71 and 72. Herein, an arrow (front) in the drawing indicates the front of the vehicle.

Please replace paragraph 113 with the following amended paragraph:

[113] Such intersection points 246 and 247 are also bending pivoting parts of the constant velocity joints 196 and 206.

Please replace paragraph 115 with the following amended paragraph:

[115] As such, by placing the bending pivoting parts of the constant velocity joints 196 and 206 on the straight line 237, in the drive shafts 73 and 74, only the internal shafts 195 and 205 rock together with the gearbox 81 but not the center shafts 197 and 207 and the external shafts 201 and 211 (refer to Fig. 13) when the main frame cage 16 rocks in the lateral direction. That is, this prevents the drive shafts 73 and 74 from displacing.

Please replace paragraph 116 with the following amended paragraph:

[116] By referring to Fig. 23, an exemplary comparison case is described where the bending pivoting part of the constant velocity joint is not placed on the swing axis of the suspension arms (or on the rocking axis of the main frame cage).

Please replace paragraph 117 with the following amended paragraph:

[117] ~~The drawing Fig. 15~~ also shows that the pin 187 serving as the differential pinion axis structuring the differential mechanism 172 passes through the above-described straight line. The pin 187 is the one placed in the center of the differential mechanism 172, and by extension, is the one placed in the center of the gearbox 81. In other words, the differential mechanism 172 is placed on the straight line 237, and by extension, the gearbox 81 is placed on the straight line.

Please replace paragraph 121 with the following amended paragraph:

[121] For example, if the left rear wheel 18 moves upward by an amount of motion M1 from the state shown in Fig. 11, the wishbone suspension arm 71 accordingly swings upward as indicated by an arrow a about the rear pivot post 85 and the front pivot post 136 (refer to Fig. 9), and responding thereto, the arc-shaped reinforcing link 88 moves upward as an arrow b. This causes the bell crank 90 to swing in the direction of arrow c ~~while with~~ with the second bolt 104 serving as a fulcrum, whereby the shock absorber 76 is compressed as an arrow d. In such a manner, impact resulting from rising of the left rear wheel 18 to the side of the main frame cage 16 (refer to Fig. 10) is lessened.

Please replace paragraph 124 with the following amended paragraph:

[124] From the state of Fig. 11, the rear wheels 18 and 21 both move upward by an amount of motion M2. Or, if the main frame cage 16 moves downward with respect to the rear wheels 18 and 21 by the amount of motion M2, the wishbone suspension arms 71 and 72 both swing upward as arrows f and f about the rear pivot post 85 and the front pivot post 136 (refer to Fig. 9). In response thereto, the arc-shaped reinforcing links 88 and 89 move upward as arrows g and g. This causes the bell cranks 90 and 91 to swing in the direction of arrows h and h ~~while with~~ with

the second bolt 104 serving as a fulcrum, whereby the shock absorber 76 is compressed as arrows j and j. In such a manner, buffering effects can be provided by the shock absorber 76.

Please replace paragraph 126 with the following amended paragraph:

[126] From the state of Fig. 11, the rear wheels 18 and 21 both move downward by an amount of motion M3. Or, if the main frame cage 16 moves upward with respect to the rear wheels 18 and 21 by the amount of motion M3, the wishbone suspension arms 71 and 72 both swing downward as arrows m and m about the rear pivot post 85 and the front pivot post 136 (refer to Fig. 9). In response thereto, the arc-shaped reinforcing links 88 and 89 accordingly move downward as arrows n and n. This causes the bell cranks 90 and 91 to swing in the direction of arrows p and p ~~while~~ with the second bolt 104 serving as a fulcrum, whereby the shock absorber 76 is extended as arrows q and q. In such a manner, buffering effects can be provided by the shock absorber 76.

Please replace paragraph 131 with the following amended paragraph:

[131] From the state of Fig. 11, when the rear wheel 18 moves upward by an amount of motion M4, and the main frame cage 16, in this example, the L pipe 54 rocks towards the left of the vehicle body by an angle of ϕ_2 , the wishbone suspension arm 71 swings upward as an arrow v about the rear pivot post 85 and the front pivot post 136 (refer to Fig. 9), and the connection bar 92 moves toward the left as indicated by an arrow w. In response thereto, the arc-shaped reinforcing link 88 moves upward and tilts toward the left, and the arc-shaped link 89 tilts leftward as indicated by an arrow x. The bell crank 90 swings clockwise ~~while~~ with the second

bolt 104 serving as a fulcrum, and moves toward left. The bell crank 91 moves leftward, and resultantly compresses the shock absorber 76. As such, the buffer effects can be achieved.

Please replace paragraph 138 with the following amended paragraph:

[138] In Figure 22(a), when the left rear wheel 18 moves upward by the amount of motion M1, the drive shaft 73 bends pivots at the constant velocity joint 196, and the resulting bending angle will be α_1 .

Please replace paragraph 139 with the following amended paragraph:

[139] In Figure 22(b), when the main frame cage 16 rocks toward the left side of the vehicle body by an angle of ϕ_1 , the gearbox 81 rocks together therewith. The drive shaft 73 bends pivots at the constant velocity 196, and the resulting angle will be α_2 .

Please replace paragraph 140 with the following amended paragraph:

[140] In Figure 22(c), when the rear wheel 18 moves upward by the amount of motion M4, and when the main frame cage 16 rocks toward the left of the vehicle body by an angle of ϕ_2 , the gearbox 81 rocks together therewith. The drive shaft 73 bends pivots at the constant velocity joint 196, and the resulting angle will be α_3 . This bending pivoting angle α_3 is in the acceptable range for bending pivoting of the constant velocity joint 196.

Please replace paragraph 142 with the following amended paragraph:

[142] In Figure 23(a), when the left rear wheel 361 moves upward by the amount of motion

M1, the left drive shaft 352 ~~bends~~pivots at the constant velocity joint 356, and the resulting ~~bending pivoting~~ will be β_1 .

Please replace paragraph 143 with the following amended paragraph:

[143] In Figure 23(b), when the main frame cage 365 rocks toward the left side of the vehicle body by an angle of ϕ_1 , the gearbox 351 rocks together therewith. The drive shaft 352 ~~bends~~pivots at the constant velocity joint 356, and the resulting angle will be β_2 .

Please replace paragraph 144 with the following amended paragraph:

[144] In Figure 23(c), when the rear wheel 361 moves upward by the amount of motion M4, and when the main frame cage 365 rocks toward the left of the vehicle body by an angle of ϕ_2 , the gearbox 351 rocks together therewith. The drive shaft 352 ~~bends~~pivots at the constant velocity joint 356, and the resulting angle will be β_3 .

Please replace paragraph 145 with the following amended paragraph:

[145] This ~~bending pivoting~~ angle β_3 will show $\beta_3 > \alpha_3$ in comparison with the ~~bending pivoting~~ angle α_3 of Fig. 22(c).

Please replace paragraph 146 with the following amended paragraph:

[146] Here, to make the ~~bending pivoting~~ angle β_3 to be the ~~bending pivoting~~ angle α_3 , there is a need to increase the total length of the drive shaft (reference numeral thereof is 352a) to be LL3. It means the vehicle width is increased.

Please replace paragraph 147 with the following amended paragraph:

[147] In consideration thereof, in the present invention, as described by referring to Fig. 13, the coupling positions of the drive shafts 73 and 74 to the gearbox 81 are offset against along the front and rear of the line connecting the axles with the rear wheel 18 and the rear wheel 21 (i.e., external shafts 201 and 211). This allows diagonal placement of the drive shafts 73 and 74 in the vehicle width direction. As a result, in spite of increasing the total length of the drive shafts 73 and 74, the treads of the rear wheels 18 and 21 can be reduced.

Please replace paragraph 148 with the following amended paragraph:

[148] The comparative examples shown in Figs. 23(a) to (c) are those in which the rocking axis 367 of the main frame cage 365 does not coincide with the bending pivoting part of the left drive shaft 352 (i.e., constant velocity joint 356 in the drawing). The examples shown in Figs. 22(a) to (c) are those in which the bending pivoting part of the drive shaft 73 (i.e., constant velocity joint 196 in the drawing) is placed on the rocking axis of the main frame cage 16. As such, the example in which the bending pivoting part is placed on the rocking axis shows the smaller bending pivoting angle of the constant velocity joint, and the thread tread of the rear wheel can be smaller.

Please replace paragraph 152 with the following amended paragraph:

[152] By the axial lines 241 and 242 of the right and left internal shafts 195 and 205 intersecting with the straight line 237, when the right and left internal shafts 195 and 205 are coupled with the rear wheels 18 and 21 via the drive shafts 73 and 74, respectively, the drive

shafts 73 and 74 do not displace that much even if the main frame cage 16 rocks in the lateral direction. What is better, by placing the intersection points 246 and 247 of the right and left internal shafts 195 and 205 with the straight line 237 at each different position, for example, in the present invention, the drive shafts 73 and 74 can be placed extensively in the diagonal direction from the right and left internal shafts 195 and 205 toward the rear wheels 18 and 21 if the right and left internal shafts 195 and 205 are placed to be away from each other in the fore and aft direction of the vehicle body. In this case, compared with the case where the right and left internal shafts 195 and 205 on the side part of the continuously variable transmission 78 or the gearbox 81, the drive shafts 73 and 74 can be increased in total length. As is known from the above, the bending pivoting angles of the drive shafts 73 and 74 can be suppressed to a small value when the rear wheels 18 and 21 move in the vertical direction. What is better, the rear wheels 18 and 21 can be smaller in tread because the drive shafts 73 and 74 are placed extensively in the diagonal direction even if long in total length. Accordingly, these contribute to reduce the width of the vehicle.

Please replace paragraph 153 with the following amended paragraph:

[153] Second, the present invention discloses that the rear wheels 18 and 21 are coupled to the internal shafts 195 and 205 via the drive shaft 73 including a pair of constant velocity joints 196 and 198 (refer to Fig. 13) and the drive shaft 74 including a pair of constant velocity joints 206 and 208 (refer to Fig. 13). In detail, the internal shafts 195 and 205 of the drive shafts 73 and 74 serve as output axes, and the bending pivoting parts of the constant velocity joints 196 and 206 on the side of the internal shafts 195 and 205, i.e., the intersection points 246 and 247, are placed on the straight line 237.

Please replace paragraph 154 with the following amended paragraph:

[154] By such a placement of the constant velocity joints 196 and 206 on the side of internal shafts 195 and 205 on the straight line 237, the constant velocity joints 196 and 206 remain still even if the internal shafts 195 and 205 tilt responding to rocking of the main frame cage 16 in the lateral direction. Accordingly, even if drive shafts 73 and 74 swing together with the wishbone suspension arms 71 and 72, the bending pivoting angles of the constant velocity joints 196 and 206 can be reduced.

Please replace paragraph 167 with the following amended paragraph:

[167] As described above, by offsetting the straight line 237 downward, the longitudinally-long gearbox 252 can be used if suiting suited for the device.

Please replace paragraph 170 with the following amended paragraph:

[170] In the three-wheeled motor vehicle according to the first aspect hereof, the right and left output axes ~~are both intersected with~~ intersect the rocking axis, and their intersection points are ~~located in each different position not coincident~~. Accordingly, with such a structure that the right and left output axes each intersect with the rocking axis, through coupling of the right and left output axes with the rear drive wheels each via a drive shaft, the drive shafts do not displace that much even if the main frame cage rocks in the lateral direction. Further, the resulting intersection points of the right and left output axes and the rocking axis are respectively placed in each at different position positions along the rocking axis. Accordingly, if the right and left output axes are so provided as to be away spaced apart from each other in the front and rear

direction of the vehicle body, in the present invention, the drive shafts can be placed extensively in the diagonal direction from the right and left output axes to the rear drive wheel side.

Compared with a case where the right and left output axes are provided on the side part of the transmission or the reduction gear, the drive shaft can be increased in its total length. In consideration thereof, the bending pivoting angle of the drive shaft can be suppressed to a small value when the rear drive wheels move in the vertical direction, and what is better, the tread of the rear drive wheels can be reduced because the drive shaft is placed extensively in the diagonal direction even if it is long in total length.

Please replace paragraph 171 with the following amended paragraph:

[171] In the three-wheeled motor vehicle according to the second aspect hereof, the rear drive wheel is coupled to the output axis via the drive shaft including a pair of constant velocity joints, and a bending pivoting part of the constant velocity joint on the output axis side is placed on the rocking axis. Accordingly, even if the output axis tilts responding to the vehicle body moving in the lateral direction, the constant velocity joint remains still. Thus, even if the drive shaft swings together with the suspension arms, the bending pivoting angle of the constant velocity joint can be reduced.